



US 20160378981A1

(19) **United States**

(12) **Patent Application Publication**  
**Cutler et al.**

(10) **Pub. No.: US 2016/0378981 A1**

(43) **Pub. Date: Dec. 29, 2016**

(54) **INTRUSION DETECTION FOR SUBMERGED  
DATACENTERS**

(71) Applicant: **Microsoft Technology Licensing, LLC**,  
Redmond, WA (US)

(72) Inventors: **Benjamin F. Cutler**, Seattle, WA (US);  
**Norman Ashton Whitaker**, Seattle,  
WA (US)

(21) Appl. No.: **15/167,808**

(22) Filed: **May 27, 2016**

**Related U.S. Application Data**

(63) Continuation of application No. 14/752,669, filed on  
Jun. 26, 2015, Continuation of application No.  
14/752,676, filed on Jun. 26, 2015.

(60) Provisional application No. 62/286,961, filed on Jan.  
25, 2016, provisional application No. 62/286,964,  
filed on Jan. 25, 2016.

**Publication Classification**

(51) **Int. Cl.**

**G06F 21/55** (2006.01)

**G08B 13/24** (2006.01)

**H05K 7/14** (2006.01)

(52) **U.S. Cl.**

CPC ..... **G06F 21/554** (2013.01); **H05K 7/1495**  
(2013.01); **G08B 13/2491** (2013.01); **G06F**  
**2221/034** (2013.01)

(57)

**ABSTRACT**

Examples of the disclosure provide a datacenter configured  
for operation while submerged in water. The datacenter  
includes one or more physically separable modules. The  
datacenter also includes an intrusion detection system that  
has one or more intrusion detection modules.

